

IMAGE PROCESSING

```
from keras.preprocessing.image import ImageDataGenerator
```

In []:

```
train_datagen = ImageDataGenerator (rescale = 1./255, shear_range=  
0.2, zoom_range= 0.2, horizontal_flip = True)
```

In []:

```
test_datagen = ImageDataGenerator (rescale = 1)
```

In []:

```
x_train =  
train_datagen.flow_from_directory(r'C:\Users\maris_q3mm6nk\Desktop\FILES\da  
ta_for_ibm\Fertilizers_Recommendation_System_For_Disease_  
Prediction\Dataset Plant Disease\fruit-dataset\fruit-  
dataset\test', target_size = (128,128), batch_size = 32, class_mode =  
'categorical')  
x_test =  
test_datagen.flow_from_directory(r'C:\Users\maris_q3mm6nk\Desktop\FILES\dat  
a_for_ibm\Fertilizers_Recommendation_System_For_Disease_  
Prediction\Dataset Plant Disease\fruit-dataset\fruit-  
dataset\train', target_size = (128,128), batch_size = 32, class_mode =  
'categorical')  
  
Found 1686 images belonging to 6 classes.  
Found 5384 images belonging to 6 classes.
```

In []:

```
x_train =  
train_datagen.flow_from_directory(r'C:\Users\maris_q3mm6nk\Desktop\FILES\da  
ta_for_ibm\Fertilizers_Recommendation_System_For_Disease_  
Prediction\Dataset Plant Disease\Veg-dataset\Veg-  
dataset\test_set', target_size = (128,128), batch_size = 32, class_mode =  
'categorical')  
x_test =  
test_datagen.flow_from_directory(r'C:\Users\maris_q3mm6nk\Desktop\FILES\dat  
a_for_ibm\Fertilizers_Recommendation_System_For_Disease_  
Prediction\Dataset Plant Disease\Veg-dataset\Veg-  
dataset\test_set', target_size = (128,128), batch_size = 32, class_mode =  
'categorical')  
  
Found 3416 images belonging to 9 classes.  
Found 3416 images belonging to 9 classes.
```

In []: